Challenging AI Empire: Toward a Decolonial and Queer Framework of Data Resurgence

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Abstract

In the age of AI, when models like DALL-E and ChatGPT impact countless aspects of our lives, the dehumanizing and harmful features of AI that have plagued data science since its inception continue resulting in the routine erasure, exploitation, and subjugation of people of color, Indigenous people, women, queer, non-binary, immigrant, dis/abled, and non-Western people. Far from a "glitch" or unintentional error, these endemic issues are a function of the systemic oppression upon which the global AI industry is built. Rooted in colonialism, heteropatriarchy, and racial capitalism, this perpetual oppression shows that we live not simply in the Age of AI but in the Age of *AI Empire*. Since Big Data and algorithms only further reinforce the logics of hegemony, extractivism, surveillance, and subjugation which drive AI Empire, we argue that reforming AI from within the same oppressive system that created it can do little beyond providing band-aid solutions.

Instead, to advance justice, we must radically transform our ideas about data and technology and develop them from the bottom-up, from the perspectives of those who stand the most risk of being harmed. Rather than being perceived as "vulnerable," the people and communities most directly impacted by AI are more properly understood as demonstrating technological ingenuity, alterity, sustained resistances, and refusals against AI Empire – practices we call *Data Resurgence.* Through the lessons learned from Indigenous, decolonial, and queer communities, we show that data resurgence can be a powerful collective response to AI Empire based on Anti-coloniality, Relationality, Sovereignty, and Liberatory Praxis.

Challenging AI Empire:
Toward a Decolonial and Queer Framework of Data Resurgence

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Instead, to advance justice, we must radically transform our ideas about data and technology and develop them from the ground-up, from the perspectives of those who stand the most risk of being harmed. Rather than being perceived as "vulnerable," the people and communities most directly impacted by AI are more properly understood as demonstrating technological ingenuity, alterity, sustained resistances, and refusals against AI Empire – practices we call *Data Resurgence.* Through the lessons learned from Indigenous, decolonial, and queer communities, we show that data resurgence can be a powerful collective response to AI Empire based on Anti-coloniality, Relationality, Sovereignty, and Liberatory Praxis.

Keywords: AI Empire, data resurgence, data colonialism, critical data studies, data justice

1. Introduction

The Line is an ultra-futuristic smart city project that invites potential residents to re-invent city living by locating all essential services within a five-minute walk. Behind a glass wall, the vertical city intends to provide equal access to nature and urbanism, friends and coworkers, personal entertainment, and civic responsibilities, meaning that residents will not have to leave their homes to get what they need. NEOS, an interconnected artificial intelligence (AI) environment based on constant information exchange, will predict and deliver any product before it is even needed in the Tabuk Province of northwestern Saudi Arabia, amid a major forcible displacement of Indigenous tribes like the Howeitat as well as the execution of their leaders for opposing the $500 billion megaproject set to host the Asian Winter Games in 2029.[1] In the name of building a perfect reality where all barriers to humanity will be removed, projects like The Line end up removing what often turns out to be the greatest barrier to this ideal future: humanity itself. Both the Indigenous

communities and the future residents of The Line need to be constantly monitored, managed, and controlled through the brute force of government-ordered executions or through the hyper surveillance capability of every element in the "smart" city—a glass prison more accurately described as "the captured city" of corporate interests and state violence (Sadowski, 2019).

In this near future, whether you fall into the category of the "backward," "progress-impeding" Bedouin tribespeople or the "forward-looking" tech-savvy urbanite residing in the smart city would make little difference in the efficiency-maximizing calculus of the technoscientific utopia of frictionlessness. Both "categories" present the system with variation, uncertainty, and unpredictability, which need to be eradicated for the system to achieve maximum productivity and efficiency (Arendt, 1958; Marcuse, 1941). And yet, this ultimate convergence remains hidden from those of us lucky enough to be based in "the developed world," where the divide between "the West and the rest" is not bridged but rather deepened by technological progress despite its grandiose promises to serve as a "great equalizer" of humanity (Brock Jr, 2020). In fact, tech-progress is essentially an ideology that creates as many, if not more, barriers than the number of bridges it purports to build for a more equal and connected world (Shiva, 2014; Taylor, 2014).

The systemic oppression brought about by this insidious ideology has its roots in colonialism, heteropatriarchy, and racial capitalism, which is why we argue that we live not simply in the Age of AI but in the Age of *AI Empire*. AI Empire is driven by the logics of hegemony, extractivism, surveillance, and subjugation, which are reinforced and intensified through data and algorithms. Trying to reform or regulate AI from within the same oppressive system that created it can therefore do little beyond providing band-aid solutions. This argument is not new; others before us have argued that anyone interested in understanding the course of AI and data science needs to go beyond their technical aspects and understand them as products of historical, geopolitical, cultural, racial, and gendered factors (Benjamin, 2019; Crawford, 2021; Noble, 2018; Browne, 2015). What we add to this important body of work is the idea that neither the problem—AI Empire—nor the possible solutions—defying it—can be understood with the same epistemological lens and worldview that created AI Empire in the first place.

For justice to prevail, we must radically transform our ideas about data and technology and develop them from the ground up, from the perspectives of those who stand the most risk of being harmed. Rather than being perceived "victims," the people and communities most directly impacted by AI technologies are more properly understood as demonstrating technological ingenuity, alterity, sustained resistances, and refusals against the dehumanizing logics of AI Empire. We call these practices *Data Resurgence.* With the lessons learned from Black, Brown, Indigenous, queer, subaltern, poor, unhoused, un-free, and DisCrit communities, we show how this collective framework can be a powerful response to AI Empire that can help us imagine more just and inclusive futures for all, based on the principles of Anti-Coloniality, Relationality, Sovereignty, and Liberatory Praxis.

The rest of this paper is organized as follows: Section 2 presents a theoretical framework for understanding the far-reaching effects and even further-reaching drivers of AI Empire through examples from around the world. In Section 3, we delineate the practice of *resurgence*, particularly as theorized by Mississauga Nishnaabeg writer, musician, and academic Leanne Betasamosake Simpson in the context of Indigenous life and struggle. Section 4 mobilizes the practice of resurgence in the domain of data and technology to introduce the multi-layered decolonial-queer framework of *data resurgence*, which we offer as a powerful collective counterforce to the

insidious forces of AI Empire. Section 5 summarizes the conceptual work of theorizing AI Empire and its antidote, data resurgence, and offers a glimpse into some possible future paths.

2. Theorizing the Faces, Roots, and Othering Violence of AI Empire

The centuries-old tendency of Western epistemology to create a division between a Subject and a "Other" is at the heart of the violence inflicted by the unintended consequences of new media and technology, including AI systems (Arendt, 1958). Non-Western, non-white, non-male, poor, queer, transgender, dis/abled, non-Christian, non-capitalist, un-educated, subaltern, un-housed, un-free: people outside the dominant group are often perceived to be an obstacle in tech-progressive utopias and discarded as "surplus humanity," an afterthought, an impediment (Said, 1979; Muñoz, 1999). The Other is described as un-technological, or as only using technology for nefarious purposes, and therefore uncivilized, even though these communities are in truth the most heavily technologized for the purpose of their surveillance and control (Abdurahman and Ghoshal, 2021; Mavhunga, 2014).

Dismantling the idea of the Other is no simple task, and it is therefore critical to keep in mind the caveats issued by transnational feminism reflected in the works of scholar-activists such as Chandra Mohanty. Combating the processes of othering marginalized communities cannot happen in the form of superficial empty signifiers such as "universal sisterhood," in the case of non-Western and Western women, because it is undeniable that there are significant differences in the conditions of these groups (Mohanty, 2005). These dehumanizing differences are brought about in no small part by the joint projects of coloniality, heteropatriarchy, and global racial capitalism—the persistent sociopolitical, economic, and cultural order that engenders AI developments such as The Line and which is in turn shaped by them. The Line in Saudi Arabia, as well as the facial identification anti-protest crackdowns in Hong Kong, Iran, and Russia, along with NATO's "smart" weapons: The neo-imperialist race for power fueled by AI is so reminiscent of the imperial games of the past that leading political scientists have started talking about "Empire Resurgent," even though we live in ostensibly "postcolonial" times.[2]

2.1 Interlocking Matrices of the AI Empire: Data Colonialism, Data Commodification, Biometric Profiling, and Technological Apartheid

As the world eagerly awaits the advent of a fully datafied city like The Line, where every action will be captured and translated into data in real time, the Uyghur people in the Chinese Xinjiang province—one of China's largest ethnic and religious minorities—have had to live in a state of similar constant data capturing for years. Smart technologies enable the total integration of multiple data streams and sensorial information to surveil the online communication of journalists and dissidents critical of the monarchy in the form of military-grade "mercenary spyware" (House, 2022). The process by which governments and corporations privatize, weaponize, and claim ownership of the data produced by their users and citizens has come to be known as *data colonialism* (Coleman, 2018; Couldry and Mejias, 2019). In applying a colonial lens to the contemporary phenomena of datafication and data extraction, we should be careful not to erase the ongoing trauma and injustice brought about by the structures of modernity/coloniality, or the co-constitutive forces of colonialism and capitalism (Mignolo, 2007).

The narrative of colonialism and modernity has come to shape many aspects of today's world through the material and epistemic violence issued by the West against its formal and informal colonies (Appiah, 2023). Much of today's state and corporate power relies on churning through large swaths of continuously captured data for decision-making and innovation. A big part

of these data streams are generated in former colonial spaces or made sense of through the labor of non-Western subjects. Take, for example, the recent revelations about the much-acclaimed OpenAI ChatGPT public user interface, whose remarkable properties are in part due to the $2 per hour labor of Kenyan content moderators.[3]

Once the data grab has occurred under the auspices of data colonialism, the context of data—the human stories and circumstances keeping it tethered to the social world—is irretrievably lost, and data is turned into a commodity to be bought and sold in the Big Data marketplace of AI Empire. This process of *data commodification* stands in direct contrast to what makes us human: our sociality. Sociality implies building and maintaining relationships, not just within but also across identities, generations, and species. The neatly packaged data bundles of unified depersonalized aggregate data in which any trace of intersubjectivity is erased is just another product in the hands of the data brokers responsible for what Lamdan calls "the Costcoization of data" (Lamdan, 2022). This is the idea that data, even in its most diverse forms, is so ubiquitous and easy to find in one-stop data shops that acquiring it is akin to going to a big-box store to purchase everything you need in one place.

Following this convenient data acquisition process is the analysis step, which enables AI systems to make predictions and categorize objects—or humans—for the purpose of determining their role and place in the world. This includes racial profiling and even the inference of human sexuality. In this context, the Uyghur experience in China is more properly understood as *biometric mass surveillance*, an extreme yet growing type of *biometric profiling*. This describes the use of systems or technologies that collect, analyze, and/or generate data (including biometric data) on large numbers of people instead of limiting surveillance to individuals about which there is 'reasonable suspicion' of wrongdoing (De Hert and Bouchagiar, 2022). Various streams of personal data such as skin color, height, face scans, and voiceprints from street surveillance cameras, and recently also mandatory DNA samples, are all fed into government integrated joint operations platforms where they can be linked to people's national identification numbers to yield a unique and comprehensive personal profile (Xu et al., 2022). Similar human rights concerns have been raised with respect to the introduction of the Unique Identification Authority of India's (UIDAI) *Aadhaar*, the world's largest biometric surveillance system, which has been critiqued as embodying Hindutva and neoliberal ideology aimed at surveilling and controlling Muslim, caste-oppressed, Indigenous minorities such as Dalits and Adivasis (Prabhakar, 2020).

The adoption of cutting-edge AI-powered technology for state management and control by non-Western countries is often cloaked in the language of tech-progress. A case in point is the United Nation's enthusiastic welcome of Zimbabwe and Kenya's decision to introduce biometric-based identification, described as "leapfrog[ging] outdated tools and progress[ing] to modern innovations" (Toesland, 2021). When a government-commissioned study of HIV in Kenya attempted to collect study participants' fingerprint data in 2018, it was met with nearly unanimous opposition. This was mainly due to concerns over biometric data potentially being used for other purposes such as criminalization and prosecution of participants, especially sex workers, men who have sex with men, transgender people, people who inject drugs, and incarcerated people (Davis and Maleche, 2018). These examples are hailed as textbook cases of win-win tech-progress: The non-Western countries adopting such technological solutions see an increase in "productivity" and "leapfrog" their way to joining the ranks of the "developed" world, while the West gains new markets for its tech products. The use of fingerprints, facial recognition, or iris scans by public service agencies ranging from passport issuance to government subsidy disbursement registration and telehealth has been advertised as a key vehicle of efficiency, convenience, and optimization,

capable of identifying undocumented persons, ghost workers, and health problems in remote rural areas (Davis and Maleche, 2018).

Although it is tempting to ascribe the use of biometric mass surveillance practices to authoritarian, dictatorial, ethnonationalist, or otherwise "underdeveloped" states outside the West, the logics of total surveillance aided by technology can be found in the "developed" world as well, albeit in a less conspicuous fashion. As *Coded Bias* (2020) shows,[4] hi-tech systems of oppression are everywhere, but, paradoxically, countries like China are more transparent about using them. Within the European Union, for instance, AI-based facial recognition technologies are being used in public spaces to capture bystanders' facial proportions and classify them into racial and ethnic categories such as Roma and Sinti.[5] While it is widely acknowledged that more than half of all closed-circuit television (CCTV) surveillance cameras in use in the world today are located in a single country, China, a less-known fact is that by the same metrics, the United States is ranked second, and the United Kingdom is home to the third most heavily surveilled city in the world, London.[6] In both the United States and the United Kingdom, CCTV cameras augmented with AI-powered facial recognition capabilities have been repeatedly cited as the cause of undue race-based discrimination amounting to data- and *technology-driven apartheid* (Williams and Kind, 2019).

2.2 AI Empire's Underlying Logics: Hegemony, Extractivism, Surveillance, and Subjugation

Nation-states did not suddenly find themselves repurposing civilian technological tools for surveillance; rather, the primary, although not sufficiently recognized, impetus for technological research and development has always been military advantage over "the Other," with the goal of protecting the nation-state from that "enemy" (Virilio, 1994). It is therefore impossible to discuss AI technology without a critical look at its genealogy, including the role of state security agencies like the U.S. Defense Advanced Research Projects Agency (DARPA) in the development of the Internet, or the AI models underlying key technological breakthroughs such as the algorithms making facial recognition possible (Crawford, 2021).

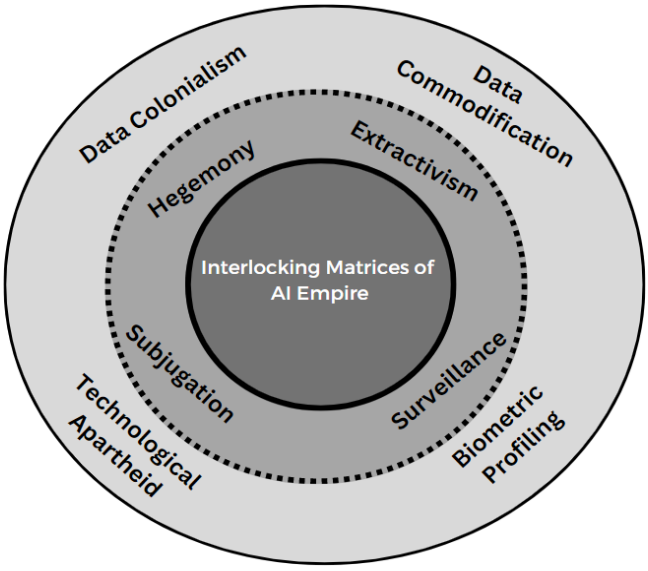

Figure 1: The interlocking matrices of AI Empire

As illustrated in Figure 1, AI Empire is situated within the larger context of intersecting systems of social domination. The operating logics of this network of power are *hegemony*, *extractivism*, *surveillance*, and *subjugation*. Together, these governing principles form the basis for maintaining

status quo power relations in AI Empire, and manifest in data and tech contexts as *data colonialism*, *data commodification*, *biometric profiling*, and *technological apartheid*. We argue that focusing only on the "faces" of AI Empire – the data and technology manifestations of these deeper colonial, racial-capitalist, heteropatriarchal roots, without taking into consideration their driving forces, cannot possibly bring about lasting and transformative change. Data colonialism can thus not be fully understood without a critical discussion of hegemony (Coleman, 2018; Couldry and Mejias, 2019). Data commodification needs to be examined in the broader context of extractivism (Crawford, 2021); biometric profiling is not likely to end on AI Empire's accord, given its constant need for surveillance (Zuboff, 2019); and technological apartheid cannot be meaningfully addressed without acknowledging the principle of subjugation (Noble, 2018).

Hegemony is the way in which the dominant "system of ideas, practices, and social relations that permeate the institutional and private domains of society" (Snow, 2001) are further normalized in sociotechnical systems, effecting forms of both erasure and hypervisibility. Although bolstered by Big Data and AI, hegemony precedes the technological age and can be understood simply as the desire to dominate over others (Gramsci, 1916). The nation-state race for AI primacy, accompanied by state-sponsored and corporate weaponization of data and algorithms, did not start in a vacuum; rather, it is the continuation of the logics of hegemony that informed many of the colonial projects of the past. The connection between this and the deep-seated racializing and gendered belief that some are better than others and therefore deserve to determine the course of history for all must be carefully examined; otherwise, we risk attending only to the symptoms of AI Empire while remaining inattentive to the root causes.

Although extant accounts of the hegemonic genealogy of AI in the larger critical data literature studies acknowledge the militarized origins of AI and its key importance for DARPA, they do not necessarily address the other side of the national security equation. Specifically, how do these systems and the top-secret teams monitoring and deploying them decide who is deemed "safe" and who is a potential "risk"? What drives the hegemonic distinction between "us" and "them" (Cheney-Lippold, 2017)? These questions underpin the kind of classificatory thinking that the heteronormative colonial state as an infrastructure has grappled with for centuries. To answer these questions, the nation-state needs to resort to two additional logics that complement the hegemonic epistemology and materiality: *extractivism* and *surveillance* (Alexander and Mohanty, 2013).

We live in a world where AI Empire can indiscriminately collect, analyze, and offer predictions and classification schemas from data because the combination of hegemony, extractivism, and surveillance has come to normalize these practices. We are told that collecting biometric data is for our own protection; that we need to sacrifice our privacy in the name of the greater good, security; and that the data we generate, *our* data, does not necessarily belong to us. Lagging technological developments, the current legal framework and the lack of transnational data protection legislation end up enabling ever more intrusive ways of data capture.

The dominant narrative about AI developing along a single axis—that of white, middle-class, cisgender, male, value-free math and engineering—is a clear sign of the risks of an essentializing framework (D'Ignazio and Klein, 2020). Adopting this narrative as objective and authentic serves to create the kinds of hegemonic exclusions that have plagued AI Empire for decades, such as the toxic racializing masculinity behind the "bro culture" of the Silicon Valleys of the world that sees itself not just as better than those who seek to uphold the law or any other forms of ethical norms but as downright messianic in its self-proclaimed mission to "save the world" (Chang, 2019). The blind belief that technology can fix even the most complicated problem

society faces—what has come to be known as *technosolutionism*—has proven time and again its dangerous inadequacy, yet it remains continuously saved by the next round of venture capital or public funding (Morozov, 2013). This has been as true about the feigned human-in-the-loop (really, fully human) solutions that Amazon Mechanical Turk has been offering for years, and about the latest "darling" of AI Empire, Chat GPT, which was recently exposed for using severely underpaid human workers in Kenya to "detoxify" its content. Such widespread instances of fake automation point to an aspect of AI Empire that it strives to keep hidden at all costs: the enormous level of exploitation needed for such systems to come even close to being "camera-ready" (Taylor, 2018). This includes labor exploitation as well as exploiting human-generated data, natural resources, and affect, jointly culminating in what we argue is the fourth interconnected pillar of today's AI Empire: *subjugation*.

AI Empire begins with the centuries-old contested-yet-undefeated hegemonic belief that some people are better than others. This epistemic privilege allows the architects of AI Empire to see certain humans as expendable, disposable, and a resource open to extraction. Even worse, coupled with the colonial-capitalist desire to control, extractivism as an ethos is fused with the logic of surveillance, which serves to further dehumanize and alienate. The culmination of these interconnected processes is the unprecedented level of control, not through brute physical force, not even through the soft power of economics, the law, or any other type of seemingly benevolent institution, but through the insidious workings of a black-boxed algorithmic infrastructure that serves to subjugate the people caught up in the government and corporate systems of algorithmic control – practically everyone. We can only expect to tame the AI Empire's massive acts of aggression through persistent, collective action. We clarify the architecture and tactics of this strategy, which we refer to as "data renaissance," in the next section.

3. Resurgence: Decolonial and Queer Practices of Resistance, Refusal, and Reclamation

"Liberation comes from below," the slogan of the Iranian women's Raha Feminist Collective,[7] is an important reminder in the age of AI Empire. In the face of AI Empire, we must strive to develop and maintain a critical attitude capable of detecting, acknowledging, resisting, and, when necessary, refusing the "false narratives of progress" (Stewart, 2020). The tech-progress of AI Empire has been made possible through the physical eradication, cultural erasure, resource expropriation, and exploitation of Indigenous, enslaved, incarcerated, and otherwise subjugated people from our colonial past through to our neocolonial present. As Black epistemologist Kristie Dotson teaches us in a powerful analysis of the commonalities and differences in the struggles of Black and Indigenous people, "*... there is no innocence in settler colonial USA*. None of us are historically or presently innocent of Indigenous dispossession and/or participating in and benefiting from anti-Blackness (along with a host of other historical oppressions)" (Dotson, 2018). As history continues to show, however, liberation is a process brought about by the collective organizing of the oppressed and those in solidarity with them as opposed to the short-term intervention of an outside force (Davis, 2016).

In the context of The Line's AI Empire project, for example, it is unlikely that the Western Enlightenment paradigm of information and technology that generated the concepts of "ubiquitous connectivity" and "smart cities" can produce a meaningful solution for the displaced and persecuted Howeitat people because it was precisely this system that racialized and Orientalized the Bedouin people in the first place (Said, 1979; Tarvainen, 2022). It is the tribespeople themselves who continue mounting courageous resistance against the hegemonic, extractivist, surveillance, and subjugation logics of the House of Saud's high-tech vanity project while giving

the rest of us a framework for just world-building and human flourishing referred to by Indigenous theorists as *resurgence* (Simpson, 2011).

The Howeitat in Tabuk are not against technology—it is, after all, precisely the Howeitat who invented one of the most intricate technologies: the means to cross the desert and not succumb to it—but rather against technology *on these terms* of heteropatriarchal capitalist-colonial hegemony, extractivism, surveillance, and subjugation (Grande, 2008). For this radical refusal of The Line's version of tech-progress, the Howeitat are paying with extreme surveillance, water and electricity-service outages, and even their lives.[8] The Line exemplifies the delusion of AI Empire architects who falsely believe that humanity will persist despite nature rather than *because of it*, in stark contrast to the symbiotic relationship Bedouins have built with their lands. However, the Howeitat's ongoing struggle for survival provides a rare ray of hope. "We won't leave our homes and we don't want compensation"—this is the unwavering stand of Tabuk Province Howeitat residents like Abdul Rahim al-Howeiti, who was violently killed in an April 2020 standoff after refusing to be forcibly removed from his home to make way for The Line.[9] Al-Howeiti's community bravely carries on his work; its sheer refusal to accept compensation and resettle is a clear demonstration that the uncontested rule of AI Empire is not inevitable, despite the enormous human cost.

This, says Mississauga Nishnaabeg writer Leanne Betasamosake Simpson, is at the core of the practice of collective *resurgence*, which includes "significantly re-investing in our own ways of being: regenerating our political and intellectual traditions; articulating and living our legal systems; language learning; ceremonial and spiritual pursuits; creating and using our artistic and performance-based traditions" (Simpson, 2011). To make the idea of resurgence possible, according to Simpson, individuals and collectives must "diagnose, interrogate and eviscerate the insidious nature of conquest, empire, and imperial thought in every aspect of our lives" and "reclaim the very best practices of our traditional cultures, knowledge systems and lifeways in the dynamic, fluid, compassionate, respectful context within which they were originally generated" (Simpson, 2011). Resurgence, then, means recognizing the generative potential of intergenerational and interspecies wisdom and knowledge as a form of information no less (and perhaps even more) powerful than the constant stream of user-generated data captured by sensors and used by AI. Most importantly, it means imagining technology and information *otherwise,* based on anti-coloniality, sovereignty, relationality, and liberation rather than hegemony, extractivism, surveillance, and subjugation (Dutta et al., 2021; Ramasubramanian and Banjo, 2020).

By embarking on this journey, particularly in the parts of the world most impacted by AI Empire, we will see that far from there being two qualitatively different kinds of technology—liberation technologies vs. technologies of subjugation—the logics of the interlocking matrices of AI Empire ultimately serve to increase systemic oppression rather than to alleviate it and create more freedom and flourishing. Through the lessons and ideas of decolonial, queer, and anti-racist theories, we chart a roadmap of the liberatory coalitions and projects to which, mostly unbeknownst to ourselves, we owe a debt of gratitude for safeguarding our futures and keeping them from sliding into The Line. We call this live map of collective resistance *data resurgence*.

4. The Data Resurgence Framework

Data resurgence conveys the collective generative act of resistance, or the idea of community (re)building and flourishment, both as a day-to-day practice and political mobilization in the face of persistent and pervasive threats such as the incursions of AI Empire. The Howeitat opposition

to The Line's destruction of their habitat is a powerful example of what we mean by resurgence. It captures not just the courageous acts of resistance against the megacity project, even at the cost of human life, but also the less conspicuous yet no less meaningful acts of existing, living, and thriving as a community in spite of the perpetual dangers and outright violence. Resurgence is also about *renewed attention to past injustices*, such as the hashtag activist action in the aftermath of George Floyd's, which powerfully brought the memory of previous Black victims of police violence back into public discourse (Wu et al., 2023). Thus, resurgence, is about the opposition and refusal of a dominant regime but also about the ways in which communities and coalitions persist in living out their collective freedom, wisdom, spirituality, and cosmologies.

We see data as a broad term that encompasses numbers, stories, communication, media, information, and technology, but also the life of those it belongs to. Since there are numerous avenues to arrive at such a life, even within the same community, "data" are necessarily plural to convey the many different and beautiful ways of world-making among anticolonial peoples and communities. At the same time, in an era marked by AI Empire's monocultural technology as a means of hegemony, extractivism, surveillance, and subjugation, we seek to re-establish the idea of data as *technics*, or the tools capable of transforming the world for the better, per revolutionary philosopher Herbert Marcuse (Marcuse, 1941). From this pluralistic and inclusive vantage point, we see that data, far from being an industrial raw material for AI, is the living breathing story of shared lives and environments.

To us, decolonizing AI means that we decenter the United States—and the West more broadly—as the uncontested site of AI innovation and recuperate the stories of immigrants, women (of color), and communities outside the Western hemisphere who, even when working within the limited scope of Big Tech indentured servitude, have found ways to resist and disrupt the status-quo throughout the history of technology. We believe that anchoring AI in non-Western perspectives is important for at least three reasons: (1) algorithmic technologies are oftentimes first tested on those most marginalized among us, including refugee camp residents, as in the deeply troublesome example of refugees in Jordan buying products with iris scanning technology; (2) those most marginalized among us are often most directly targeted by algorithmic surveillance; and (3) data and algorithms are highly portable and, indeed, transnational, which suggests that a transnational lens of analysis is the only one guaranteed to capture the full supply chain of such technologies and their even farther-reaching effects.

It is with this goal in mind that we propose a "Data Resurgence Framework," which blends the artificial boundaries between humanity and technology, as well as between diverse bodies of literature relating to subaltern anti/de/post-colonial and queer studies, on the one hand, and information, data, and communication sciences, on the other. Through this framework, we create space for recognizing and celebrating forms of knowledge, wisdom, and technology outside AI Empire. These data resurgence technologies constitute a framework for freedom and flourishing for all. Data Resurgence offers a powerful response to the faces and roots of AI Empire based on the decolonial and queer principles of *Anti-Coloniality*, *Relationality*, *Sovereignty*, and *Liberatory Praxis*.

The Data Resurgence Framework is depicted in Figure 2. We use an Indigenous *kolam* design, traditionally created using rice flour outside the entrances of homes by women in South India, to represent decolonizing AI. Together, the colorful petals of the flowers of resurgence in the margins represent alternative and oppositional ethics, priorities, strategies, tactics, and sensibilities that contrast the core. The core or center is represented by the gray colors of the interlocking matrices of AI Empire.

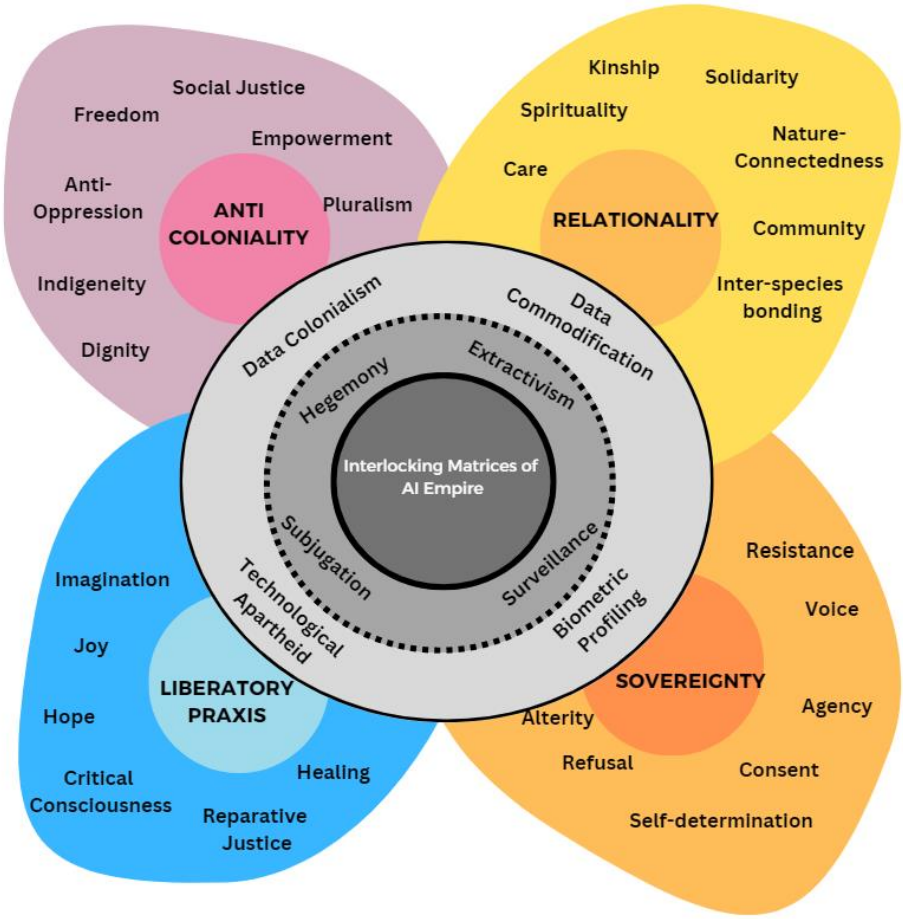

Figure 2: The Data Resurgence Framework

The colorful outer petals of the framework represent data resurgence, which recognizes collective intergenerational and inter-species practices that refocus our energies and knowledge on connecting with our selves, one another, our communities, and our planet as a whole. It includes everyday acts of resistance, renewal, and reclamation within the larger context of separation, disconnection, commodification, and dehumanization brought about by AI Empire.

The four petals of resurgence—anti-coloniality, relationality, sovereignty, and liberatory praxis—overlap and layer together to form a blooming rainbow-colored flower. We have picked multiple colors of the petal to indicate that pluralism can co-exist while working collectively toward resurgence. Simultaneously, we use the rainbow colors of the pride flag to represent a move toward queering AI. Each of these petals is essential in the resistance against a particular manifestation and underlying logic of AI Empire.

Anti-coloniality as an intentional position and practice resists histories and legacies of colonialism and hegemony, especially data colonialism within our context. Relationality is a foundational principle of Indigenous, decolonial, and queer perspectives which offers a way of transcending AI Empire's logics of extractivism and data commodification. Sovereignty is the principle that opposes and resists mass bio profiling through data, stemming from surveillance. Liberatory praxis is our answer to technological apartheid that comes out of the logic of subjugation, which is a central pillar of AI Empire. We explain each petal in more detail below.

Anti-Coloniality

Since coloniality is the central organizing logic of AI Empire, informing the development of data, information, and technology, anti-coloniality is the foundational principle of data resurgence and therefore, the first petal of resurgence (Coleman, 2018). We use the term coloniality rather than colonialism to highlight the complex histories of colonialism that continue to shape the everyday lived experiences with technology around the world through related logics of Eurocentric hegemony, extractivism, imperialism, neocolonialism, corporate monopolies, and neoliberal capitalism (Sultana, 2022; Ramasubramanian and Banjo, 2020).

Anti-coloniality explains data and digital inequalities and oppression through the lens of (neo)colonization within the global platformization of information (Christian et al., 2020). This principle focuses on how data colonialism, neoliberal capitalism, and heteropatriarchy shape our understanding of power, progress, and technological development. We critique the limits of AI and its white cisgender male-dominated history. However, we also argue that this history is just one possible origin story and that there are others, purposefully hidden from us, that emphasize the role of women, especially women of color, in the development of computation. We use the transnational feminist concept of *braiding histories* to show how the hegemonic history of AI, purportedly beginning with the 1956 Dartmouth workshop, is complicated and challenged by the contemporaneous work of women such as Alice Mary Hilton, who coined the term "cyberculture," and IBM scientist Evelyn Boyd Granville. Recovering these erased histories of information and technology allows us to (1) destabilize the notion of AI as developed exclusively by white men, and (2) anchor the practice of data science as a communal liberatory effort rather than solo inventorship.

Relationality

The second, no less important, principle, petal of data resurgence is relationality. Queer perspectives shape our understanding of relationality as kinship, care, intimacy, intersubjectivity, desire, and community (TallBear and Willey, 2019). At the same time, transnational feminisms help us interrogate heteropatriarchal whiteness in racialized gendered care work that sustains AI and tech. Drawing from Indigenous studies, relationality also includes spiritual and emotional connectedness with the environment, nature, and other species on this planet that are mediated, sustained, and disrupted by tech and AI (Moreton-Robinson, 2017).

Through the lens of relationality, we highlight the powerful voices of Two-Spirit, Hijra, Roma, and poor transgender people in the Global and local South. While we draw on existing work on gender in data and technology, we seek to extend it by centering the voices of non-Western communities and diasporic subjects, including refugees, undocumented immigrants, and climate migrants. This allows us to offer a resolutely transnational perspective on AI rooted in subaltern studies, transnational feminisms, postcolonial, and decolonial discourse, and solidarity. This perspective helps restore the connection between AI, activism, and the arts within the larger context of community-building and collective healing. Based on Indigenous notions of relationality, kinship, and spirituality, this inclusive lens of data and information allows us to understand technology through our shared interconnectedness with nature, other humans, and other species.

Sovereignty

Sovereignty, third principle of data resurgence, is about agency, self-determination, and voice (Ramasubramanian and Banjo, 2020). It is guided by Indigenous and Aboriginal perspectives on land rights, seed ownership, data sovereignty, technological sovereignty, and heteropatriarchal white possessiveness (Walter et al., 2021; Moreton-Robinson, 2020). We mobilize the principle of

sovereignty as a powerful approach to issues of ownership, rights, responsibilities, choice, capacity, and ethical sharing practices within AI, tech, information, and data sciences.

We theorize sovereignty using the concepts of transnational feminist agency, resistances, refusals, and alterity as they relate to technological practices. Data resurgence collectives such as The Dalit Queer Project, The African Languages in NLP Masakhane Consortium, Data for Black Lives, Data for Indigenous Justice, Equality Labs, Derechos Digitales, Nuba Reports, and The New Humanitarian show that, far from solitary, disembodied, and passive activity, technology is inherently communal, artistic, and happens primarily "out in the streets" rather than "behind the screen." They move us to go beyond community-based participatory action research towards *transnational community-driven praxis*, which re-imagines data science from the point of view of transnational communities resisting AI Empire and using data and algorithms for justice rather than subjugation.

Liberatory Praxis

Liberatory praxis is the final principle that guides us toward inclusive and equitable futures through data resurgence. Drawing on decolonial and queer perspectives, it focuses on awareness, authenticity, non-duality, consciousness-raising, plurality, criticality, and reimagination. It emphasizes critical pedagogy, lived experience as knowledge, and trauma-informed approaches to education that center critical consciousness, social justice, activism, civic participation, shared storytelling, support networks, experiential learning, embodied ethics, collective freedom, optimism, hope, joy, pleasure, meaning, and purpose through AI, tech, information, and data sciences (Giroux, 2010; Ramasubramanian et al., 2021).

Liberatory Praxis emphasizes the need for going beyond silos and silences across disciplines toward an integrative, immersive, and critical pedagogical approach. We present a critical approach to deep learning and its consequences meant for a wide audience, from faculty and students to investigative journalists and community organizers to everyday people. This approach is rooted in critical algorithmic literacies and channels data resurgence by developing open-source data science projects that do not harm but rather further the public interest.

We believe that together, these four organizing principles form a solid foundation upon which sustained data resurgence practices can grow and flourish. In structuring our arguments around the concept of data resurgence and its principles, we build on a now well-established and growing archive of critical data studies (Kitchin and Lauriault, 2014) that has given us concepts to name and fight algorithmic injustice such as algorithmic oppression (Noble, 2018), digital colonialism (Coleman, 2018), blended cultures (Komarraju et al., 2022), (Indigenous) data sovereignty (Kukutai and Taylor, 2016), data feminism (D'Ignazio and Klein, 2020), transnational cyberfeminist webs (Gajjala, 2004), postcolonial computing (Irani et al., 2010), design justice (Costanza-Chock, 2020), data justice (Dencik et al., 2016), and social justice informatics (Tacheva et al., 2022), to name a few. It is not a coincidence that these concepts were all developed by women and nonbinary people, especially women of color and Indigenous women, and people with legacies of non-Western worldviews and immigration, both forced and seemingly voluntary (Steele, 2021).

5. Conclusion

Historically marginalized communities have always given and continue to give rise to powerful transnational justice-oriented tech collectives that defy the logics of AI Empire. These collectives never cease to offer an equitable and humane path toward collective justice and wellbeing, as opposed to the narrow, oppressive, colonial, and profit-driven sense of "progress" dominating AI

Empire. Critical design scholar Sasha Costanza-Chock reminds us, there are technologies that are dangerous when they work and harmful when they don't (Costanza-Chock, 2020). To be clear, we are not advocating for "turning back the clock." On the contrary, we see technology as a public good that, when created, governed, and used collectively by the people through a critical understanding of its shortcomings, limitations, and outright harms for the most vulnerable among us, can become a tool for liberation for all.

For this to happen, we must build information technology (and our ideas about it) from the ground up, from the perspectives of those who stand the most risk of being harmed, both when technology fails and when it works as intended, as long as it is driven by the racial capitalist heteropatriarchal settler-colonial logics of AI Empire. We argue that, from the perspective of historically marginalized and oppressed people, the entire information technology infrastructure falls into this category. Despite the dominant narrative of advancing civilization, the Western-colonial techno-progressivist system is ultimately centered on the extraction, exploitation, and weaponization of data, labor (including affective and cognitive forms of labor), information, natural resources, and non-human resources. The Data Resurgence Framework enables us to strategize against AI Empire in order to create more inclusive and equitable futures for all. In a world divided between "the West" and "the rest," between those with and without power, those in dominant social groups and those forever relegated to the category of the "Other," data resurgence challenges the notion that the latter appear late on the technological scene as a reactionary force impeding "human progress." Instead, it enables us to experience the lives and struggles of anticolonial, anti-racist, and queer peoples in the Global and Local South as a living archive of brave practices defying the cold calculating logics of AI Empire. In the face of rising AI-driven precarity and inequality, we can all learn from this archive.

References

Abdurahman JK and Ghoshal S (2021) Grieving in the face of fascism. *Interactions* 28(6): 32-35.

Alexander MJ and Mohanty CT (2013) *Feminist genealogies, colonial legacies, democratic futures.* Routledge.

Appiah KA (2023) Is the post-in postmodernism the post-in postcolonial? *Postcolonlsm*. Routledge, pp.85-104.

Arendt H (1958) The Human Condition (dt. udT Vita activa, 1960). Chicago: Chicago University Press.

Benjamin R (2019) Race after technology: Abolitionist tools for the new jim code. *Social Forces*.

Brock Jr A (2020) Distributed blackness. *Distributed Blackness*. New York University Press.

Browne S (2015) *Dark matters: On the surveillance of blackness.* Duke University Press.

Chang E (2019) *Brotopia: Breaking up the boys' club of Silicon Valley.* Penguin.

Cheney-Lippold J (2017) *We are data.* New York University Press.

Christian AJ, Day F, Díaz M, et al. (2020) Platforming intersectionality: Networked solidarity and the limits of corporate social media. *Social Media+ Society* 6(3): 2056305120933301.

Coleman D (2018) Digital colonialism: The 21st century scramble for Africa through the extraction and control of user data and the limitations of data protection laws. *Mich. J. Race & L.* 24: 417.

Costanza-Chock S (2020) *Design justice: Community-led practices to build the worlds we need.* The MIT Press.

Couldry N and Mejias UA (2019) Data colonialism: Rethinking big data's relation to the contemporary subject. *Television & New Media* 20(4): 336-349.
Crawford K (2021) *The atlas of AI.* Yale University Press.
D'Ignazio C and Klein LF (2020) *Data feminism.* MIT press.
Davis AY (2016) *Freedom is a constant struggle: Ferguson, Palestine, and the foundations of a movement.* Haymarket Books.
Davis S and Maleche A (2018) Everyone said no: Key populations and biometrics in Kenya. *Health and Human Rights Journal (July 4, 2018)*.
De Hert P and Bouchagiar G (2022) Visual and biometric surveillance in the EU. Saying 'no'to mass surveillance practices? *Information Polity*.(Preprint): 1-25.
Dencik L, Hintz A and Cable J (2016) Towards data justice? The ambiguity of anti-surveillance resistance in political activism. *Big Data & Society* 3(2): 2053951716679678.
Dotson K (2018) On the way to decolonization in a settler colony: Re-introducing Black feminist identity politics. *AlterNative: An International Journal of Indigenous Peoples* 14(3): 190-199.
Dutta M, Ramasubramanian S, Barrett M, et al. (2021) Decolonizing open science: Southern interventions. *Journal of communication* 71(5): 803-826.
Gajjala R (2004) *Cyber selves: Feminist ethnographies of South Asian women.* Rowman Altamira.
Giroux HA (2010) Rethinking education as the practice of freedom: Paulo Freire and the promise of critical pedagogy. *Policy Futures in Education* 8(6): 715-721.
Gramsci A (1916) Hegemony, relations of force, historical bloc. *The Gramsci reader: selected writings* 1935: 189-221.
Grande S (2008) Red pedagogy. *Handbook of critical and Indigenous methodologies*. 233-254.
House F (2022) Freedom on the net 2022.
Irani L, Vertesi J, Dourish P, et al. (2010) Postcolonial computing: a lens on design and development. *Proceedings of the SIGCHI conference on human factors in computing systems.* 1311-1320.
Kitchin R and Lauriault T (2014) Towards critical data studies: Charting and unpacking data assemblages and their work.
Komarraju SA, Arora P and Raman U (2022) Agency and servitude in platform labour: A feminist analysis of blended cultures. *Media, Culture & Society* 44(4): 672-689.
Kukutai T and Taylor J (2016) *Indigenous data sovereignty: Toward an agenda.* ANU press.
Lamdan S (2022) *Data Cartels: The Companies that Control and Monopolize Our Information.* Stanford University Press.
Marcuse H (1941) Some social implications of modern technology. *Zeitschrift für Sozialforschung* 9(3): 414-439.
Mavhunga CC (2014) *Transient workspaces: technologies of everyday innovation in Zimbabwe.* mit Press.
Mignolo WD (2007) Delinking: The rhetoric of modernity, the logic of coloniality and the grammar of de-coloniality. *Cultural studies* 21(2-3): 449-514.
Mohanty CT (2005) *Feminism without borders: Decolonizing theory, practicing solidarity.* Zubaan.
Moreton-Robinson A (2017) Relationality: A key presupposition of an Indigenous social research paradigm. *Sources and methods in Indigenous studies*. Routledge, pp.69-77.
Moreton-Robinson A (2020) *Sovereign subjects: Indigenous sovereignty matters.* Routledge.

Morozov E (2013) *To save everything, click here: The folly of technological solutionism.* Public Affairs.
Muñoz JE (1999) *Disidentifications: Queers of color and the performance of politics.* U of Minnesota Press.
Noble SU (2018) Algorithms of oppression. *Algorithms of Oppression*. New York University Press.
Prabhakar P (2020) Tracing Biometric Assemblages in India's Surveillance State: Reproducing Colonial Logics, Reifying Caste Purity, and Quelling Dissent Through Aadhaar.
Ramasubramanian S and Banjo OO (2020) Critical media effects framework: Bridging critical cultural communication and media effects through power, intersectionality, context, and agency. *Journal of communication* 70(3): 379-400.
Ramasubramanian S, Riewestahl E and Landmark S (2021) The Trauma-informed Equity-minded Asset-based Model (TEAM): The six R's for social justice-oriented educators.
Sadowski J (2019) The captured city: The 'smart city'makes infrastructure and surveillance indistinguishable. realifemag. com.
Said EW (1979) *Orientalism.* Vintage.
Shiva V (2014) *Close to home: Women reconnect ecology, health and development.* Routledge.
Simpson L (2011) Dancing on our turtles back. Winnipeg, Mb. Arbeiter Ring Publishing. Winnipeg, Man.
Snow DA (2001) Collective Identity and Expressive Forms. International Encyclopedia of the Social and Behavioral Sciences. NJ Smelser and PB Baltes. London, Elsevier Science.
Steele CK (2021) Digital black feminism. *Digital Black Feminism*. New York University Press.
Stewart L (2020) "Tell'Em Boy Bye": Zora Neale Hurston and the Importance of Refusal. *Signs: Journal of Women in Culture and Society* 46(1): 57-77.
Sultana F (2022) The unbearable heaviness of climate coloniality. *Political Geography* 99: 102638.
Tacheva J, Namvarrad S and Almissalati N (2022) A Higher Purpose: Towards a Social Justice Informatics Research Framework. *International Conference on Information.* Springer, 265-271.
TallBear K and Willey A (2019) Critical relationality: Queer, Indigenous, and multispecies belonging beyond settler sex & nature. *Imaginations: Journal of Cross-Cultural Image Studies* 10(1): 5–15-15–15.
Tarvainen A (2022) The modern/colonial hell of innovation economy: Future as a return to colonial mythologies. *Globalizations*. 1-23.
Taylor A (2014) *The people's platform: Taking back power and culture in the digital age.* Metropolitan books.
Taylor A (2018) The automation charade. *Logic Magazine* 5(1).
Toesland F (2021) African countries embracing biometrics, digital IDs. *African Renewal*.
Virilio P (1994) *The vision machine.* Indiana University Press.
Walter M, Kukutai T, Carroll SR, et al. (2021) *Indigenous data sovereignty and policy.* Taylor & Francis.
Williams P and Kind E (2019) Data-driven Policing: The hardwiring of discriminatory policing practices across Europe.
Wu HH, Gallagher RJ, Alshaabi T, et al. (2023) Say Their Names: Resurgence in the collective attention toward Black victims of fatal police violence following the death of George Floyd. *PloS one* 18(1): e0279225.

Xu VX, Leibold J and Impiombato D (2022) Architecture of Repression: Unpacking Xinjiang's Governance.

Zuboff S (2019) *The age of surveillance capitalism: The fight for a human future at the new frontier of power: Barack Obama's books of 2019.* Profile books.

Notes

[1] Akkad, Dania. "Neom: Saudi Arabia Sentences Tribesmen to Death for Resisting Displacement." Middle East Eye, October 7, 2022. https://www.middleeasteye.net/news/neom-saudi-arabia-sentences-tribesmen-death-resisting-displacement

[2] Empire Resurgent: Conference at UC Irvine, Feb. 10-11, 2023 (https://sites.uci.edu/forum/)

[3] Perrigo, Billy. "OpenAI Used Kenyan Workers on Less than $2 per Hour: Exclusive." Time. Time, January 18, 2023. https://time.com/6247678/openai-chatgpt-kenya-workers/.

[4] Shalini Kantayya (2020). Coded Bias. 7th Empire Media

[5] "Romani Rights and Biometric Mass Surveillance." European Digital Rights (EDRi), August 19, 2021. https://edri.org/our-work/roma-rights-and-biometric-mass-surveillance/

[6] Brandl, Robert. "Who has the most CCTV in the world? The world's most watched people." Tooltester, July 25, 2022. https://www.tooltester.com/en/blog/the-worlds-most-surveilled-countries/#:~:text=Taking%20number%20one%20place%20for,impossible%20to%20go%20unnoticed%20here

[7] "Liberation Comes from Below." Raha Feminist Collective, January 9, 2020. https://www.rahafeministcollective.org/2020/01/09/liberation-comes-from-below/

[8] Michaelson, Ruth. ""It's Being Built on Our Blood": The True Cost of Saudi Arabia's $500 bn Megacity'." *The Guardian* 4 (2020).

[9] "Killing of Saudi activist exposes tensions over Neom megacity project." YouTube video. https://www.youtube.com/watch?v=SqinnGnn_l4